

## ABSTRACT OF THE DISCLOSURE

An interworking function (IWF) for a first and second protocol based network, for example, an H.323 protocol based network and an SIP protocol based network comprises an interworking gateway server including a state machine for defining each call processing state and a translation table for use in translating addresses formatted in each protocol. A method of interworking for use in interworking between said first protocol based network and said second protocol based network comprises the steps of receiving at said interworking gateway server serving said first and second protocol based networks a request from an endpoint in the first or second protocol based networks, establishing a state machine in memory whereby, for each state of said state machine, a message associated with that state is categorized as one of a triggering message, a non-triggering message and an error message, establishing a translation table in said memory whereby an address formatted in said first protocol has a one-for-one correspondence with an address formatted in said second protocol, processing said request in accordance with said translation table and said state machine and permitting communication between said first and second endpoints utilizing a realtime transport protocol. In the event media is terminated at said interworking gateway server, the interworking gateway server, in one embodiment, comprises a media switching fabric for switching media terminated at the gateway to an addressed endpoint capable of receiving it.